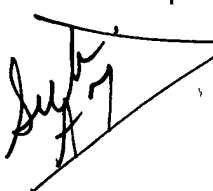


## CLAIMS

1

 A shrouded nozzle arrangement for a gas turbine engine exhaust comprising an exhaust nozzle, a duct means for providing communication of (exhaust gas) between the gas turbine and (exhaust nozzle), and a shroud which encloses the nozzle and duct means, the shroud having an exit aperture through which, in use, the exhaust nozzle discharges, (characterised in that) the exhaust nozzle is translatable from a first position, wherein (the exit plane) of the nozzle lies upstream of the exit aperture of the shroud, to a second position, wherein the exit plane of the exhaust duct lies substantially downstream of the exit aperture of the shroud.

2

A shrouded nozzle arrangement as claimed in claim 1 wherein the duct means comprises an inner duct member and an outer duct member concentric with one another, wherein the inner and outer duct members are slideably mounted and movable relative to one another, the outer duct member at all times overlapping the inner duct member such that inner and outer duct members provide continuous duct means.

3

A shrouded nozzle arrangement as claimed in claim 2 wherein a substantially annular support means is provided, the support means remaining fixed relative to one of the duct members, the other duct member being slideably mounted within the support means and moving relative to the support means.

4

A shrouded nozzle arrangement as claimed in claim 3 wherein the support means is provided with an inwardly projecting first flange, the first flange slideably engaging the slideable duct member about an annular periphery to provide a substantially gas tight seal, the slideable duct member provided with an outwardly projecting second flange, the second flange slideably engaging the support means about an annular periphery to provide a substantially gas tight

seal, the first and second flanges defining a chamber between support means and slideable duct member into which exhaust gas may be bled from within the duct means, the first and second flanges being disposed such that pressure within the chamber acts upon the slideable duct member to counter the loads imposed by exhaust gas impinging upon the exit nozzle.

- 5 A shrouded nozzle arrangement as claimed in claim 1 wherein a reheat system is provided within the duct means.
- 6 A shrouded nozzle arrangement as claimed in claim 2 wherein a reheat system is provided within the duct means.
- 7 A shrouded nozzle arrangement as claimed in claim 3 wherein a reheat system is provided within the duct means.
- 8 A shrouded nozzle arrangement as claimed in claim 4 wherein a reheat system is provided within the duct means.
- 9 A shrouded nozzle arrangement as claimed in claim 1 wherein the nozzle is capable of thrust vectoring.
- 10 A shrouded nozzle arrangement as claimed in claim 2 wherein the nozzle is capable of thrust vectoring.
- 11 A shrouded nozzle arrangement as claimed in claim 3 wherein the nozzle is capable of thrust vectoring.
- 12 A shrouded nozzle arrangement as claimed in claim 4 wherein the nozzle is capable of thrust vectoring.

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- 13 A shrouded nozzle arrangement as claimed in claim 1 wherein the shroud is configured to minimise the radar and infra-red signatures of the nozzle and exhaust gas issuing from the nozzle.
- 14 A shrouded nozzle arrangement as claimed in claim 2 wherein the shroud is configured to minimise the radar and infra-red signatures of the nozzle and exhaust gas issuing from the nozzle.
- 15 A shrouded nozzle arrangement as claimed in claim 3 wherein the shroud is configured to minimise the radar and infra-red signatures of the nozzle and exhaust gas issuing from the nozzle.
- 16 A shrouded nozzle arrangement as claimed in claim 4 wherein the shroud is configured to minimise the radar and infra-red signatures of the nozzle and exhaust gas issuing from the nozzle.

add  
B1

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